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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,561

06/02/2006

Katsuhiro Ando

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7590

10/20/2009

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP  
1250 CONNECTICUT AVENUE, NW  
SUITE 700  
WASHINGTON, DC 20036

EXAMINER

LOEWE, ROBERT S

ART UNIT

PAPER NUMBER

1796

NOTIFICATION DATE

DELIVERY MODE

10/20/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,561	<b>Applicant(s)</b> ANDO ET AL.	
	<b>Examiner</b> ROBERT LOEWE	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/23/09</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments, filed on 9/23/09, have been fully considered and are not found to be persuasive. Applicants argue that given the teachings of JP-1087957 (which is included in Applicant's information disclosure statement, filed on 9/23/09), a person having ordinary skill in the art would have not found it obvious to add an epoxy resin to the polyoxyalkylene polymers as taught in Okamoto et al. Applicants argue that JP '957 teaches the addition of epoxy compounds to isobutylene polymers in an effort to improve the storage stability of the polyisobutylene polymers. Applicants argue that the JP '957 document does not teach epoxy compounds which are added to oxypropylene polymers and concludes that the absence of this teaching provides disincentive for a person of ordinary skill in the art to add an epoxy compound to the polyoxypropylene-based compositions taught by Okamoto et al. The Examiner is not persuaded by these arguments. First, Okamoto et al. does not provide any explicit disincentive to a person having ordinary skill in the art to somehow know to only add the epoxy compounds to the polyisobutylene-based compositions and not to the polyoxypropylene-based compositions. That is, the suggestion to add an epoxy resin by Okamoto et al. is not restricted to the polyisobutylene-based compositions. Okamoto et al. specifically teaches "the epoxy resin and the reactive silicon group-containing organic polymer can be modified". The reactive silicon group-containing organic polymer includes both the isobutylene and oxypropylene polymers. Second, the JP '957 patent does not mention oxypropylene polymers at all. The fact that the JP '957 patent does not teach oxypropylene polymers does not provide a sound logic for concluding that all other polymers, including oxypropylene polymers must therefore have good storage

Art Unit: 1796

stability. Last, the fact that Okamoto et al. does not exemplify an oxypropylene-polymer based composition which includes an epoxy compound, a reference may be relied upon for all that it teaches, including non-preferred embodiments. The suggestion to add such a component to the oxypropylene-based polymers is clear given the overall teachings provided by Okamoto et al.

Regarding Applicants working and comparative Examples, the Examiner does not dispute that the surface tack times are markedly improved when using compositions which satisfy the instant claims versus those of the comparative examples. However, the specific formulations provided in the examples are highly specific and are not commensurate in scope with the instant claims. Specifically, (1) the amount of amine added is from 2.8 to 5.6 parts by weight, while the instant claim allows for 0.1 to 30 parts by weight, much broader than claimed; (2) the amount of epoxy resin employed in the working examples is 11 and 17 parts by weight, yet the claimed amount is from 0.1 to 80 parts by weight; further only one single type of epoxy resin is employed in the working examples, yet claim 1 encompasses all epoxy resins; (3) the amount of silane coupling agent employed in the working examples is 2.8 parts by weight, yet the claimed amount is from 0.1 to 20 parts by weight; further only one single type of silane coupling agent is employed in the working examples, yet claim 1 encompasses all silane coupling agents; (4) the amount of curing agent employed in the working examples is 1.7 or 2.8 parts by weight, yet the claimed amount is from 0.1 to 60 parts by weight; further only one single type of curing agent is employed in the working examples, yet claim 1 encompasses all curing agents for an epoxy resin; finally, the amount of water employed in the working examples is 1.1 parts by weight, while the claimed amount is from 0.1 to 5 parts by weight. In summary, the

Art Unit: 1796

working examples employ very specific formulations; the same cannot be said for the claimed composition.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. (WO-03/11978). For convenience, the English-language equivalent US Pat. 7,115,695 will be relied upon.

Claim 2: Okamoto et al. teaches a curable compositions which may comprise a silicon-group terminated polyoxyalkylene polymer [component (A) of Okamoto et al.], a condensation catalyst [component (B) of Okamoto et al.], an amine compound [component (C) of Okamoto et al.], an epoxy resin (20:1-29), a curing agent for the epoxy resin (20:30-53), and a silane coupling agent (21:6 and examples). Okamoto et al. teaches that component (A) may be a silyl-capped polyoxypropylene polymer (4:38-39 and component (A-1) of working examples). The

Art Unit: 1796

silane coupling agents are employed in amounts which satisfy the range of instant claim 1 (Table 2). Okamoto et al. teaches that the amount of epoxy resin may preferably be employed from 10 to 50 parts by weight per 100 parts by weight of polyoxyalkylene polymer (20:45-49). Okamoto et al. further teaches that the curing agent for the epoxy resin includes amine-based compounds, such as tertiary amines (20:36). Okamoto et al. further teaches that the amine-based compound [component (C) of Okamoto et al.] includes those amines which have a melting point of 20 °C or more (e.g., laurylamine, which is exemplified by Okamoto et al.). Last, water is employed in many of the working examples within the claimed range. Okamoto et al. teaches or suggests curable compositions which would comprise the claimed ingredients in the claimed amounts and teaches that two-art compositions can be prepared (20:62). Therefore, a person having ordinary skill in the art would have found it obvious to prepare the curable compositions as claimed given the overall teachings of Okamoto et al.

Claim 3: While Okamoto et al. does not explicitly teach the claimed viscosity and structural viscosity index required by instant claim 3, Okamoto et al. is cognizant about obtaining workable viscosities (15:44-48). It is very well known that adjusting the viscosity of a composition a within the realm of routine experimentation. A person having ordinary skill in the art appreciates the processing difficulties which may arise should the viscosity of the curable composition be too high or too low. Further, since Okamoto et al. teaches compositions comprising the same claimed ingredients, it is believed that the compositions taught by Okamoto et al. would have the same physical properties as claimed.

Claim 4: Okamoto et al. teaches that fillers may also be employed (19:22-39 and examples).

Art Unit: 1796

Claim 5: Okamoto et al. exemplifies the primary amine laurylamine as a curing promoter.

Claim 6: Okamoto et al. teaches that the curable compositions therein may serve as coating/sealing materials (21:17-32).

Claims 7 and 8: Okamoto et al. teaches that the epoxy resin curing agent may be 2,4,6-tris(dimethylaminomethyl)phenol (20:37-38).

Claim 9: Given the overall teachings of Okamoto et al., it would have been obvious to a person having ordinary skill in the art to prepare a two part composition in which the polyoxypropylene is added to one of the parts in whole; the other part being free of polyoxypropylene as the most typical two-part compositions are prepared such that components of mutually exclusive reactivity are blended together in separate parts to maintain storage stability.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 1796

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT LOEWE whose telephone number is (571)270-3298. The examiner can normally be reached on Monday through Friday from 5:30 AM to 3:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-13021302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Application/Control Number: 10/581,561

Page 8

Art Unit: 1796

/R. L./

Examiner, Art Unit 1796

28-Sep-09

/Randy Gulakowski/

Supervisory Patent Examiner, Art Unit 1796